TO:

D. LEBLANC

J. MOORE

P. TWEEDY

R. MATHIS

FROM:

J. CARTER

DATE:

10-27-98

RE:

AMERICAN FIRE SPRINKLER ASSOCIATION'S: "TECHNICAL UPDATE"

FROM TIME TO TIME, THE REFERENCED PUBLICATION IS PASSED AROUND, FOR REVIEW. PLEASE KEEP IN MIND THAT ITEMS AND DECISIONS DISCUSSED IN THIS PUBLICATION, ARE FOR GENERAL INFORMATION ONLY. THESE INTERPRETATIONS ARE NOT OFFICIAL, FROM N.F.P.A. IT IS NOT THE INTENT OF THIS OFFICE, BY CIRCULATING THIS PUBLICATION TO THE SPRINKLER REVIEW STAFF, THAT THESE INTERPRETATIONS BE REMEMBERED AND USED ON OUR REVIEWS, AS EQUIVALENCIES OR LENIENCES. THESE INTERPRETATIONS HAVE NOT BEEN OFFICIALLY ENDORSED BY OUR OFFICE. REMEMBER: ALWAYS REVIEW BY THE CODES.

IT IS THE OWNER/P.O.R.'S RESPONSIBILITY TO ASK THIS OFFICE, FOR DEVIATIONS FROM THE CODES. IF AN APPLICANT IS SEEKING A VARIANCE, WAIVER, SFM INTERPRETATION, ETC., AND INCLUDES A PARTICULAR "TECHNICAL UPDATE", TO SUPPORT THEIR REQUEST, WE WILL REVIEW THE ISSUE HERE, ON A PER PROJECT BASIS, AND ADVISE ACCORDINGLY.

CC:

H. REED

D. ZERINGUE

J. JONES



American Fire Sprinkler Association



October 1, 1998

"Are sprinklers required in the space formed by an acoustical tile ceiling suspended 2 feet below the bottom chord of open web wood trusses? There is paper-backed insulation stapled to the bottom chord of the trusses. The paper side of the insulation faces down. The space between the top and bottom chord of the trusses is sprinklered."

This question was asked about a new exception proposed for the 1999 edition (Exception No. 11 to 5-13.1.1). This proposal has not been through the comment phase, at which time we intend to have the committee further clarify the intent. Until that time, one must apply the current criteria which indirectly addresses this issue. Our informal interpretation is based on the 1996 Edition of NFPA 13.

NFPA 13:4-13.1.1 applies to this situation. In a Formal Interpretation, the committee stated that it is the intent of the committee to not require sprinklers if the exposed surfaces have been demonstrated not to propagate fire in the form in which they are installed in the space. This will permit materials with limited combustibility or treatment with a fire-retardant compound to be exposed in the concealed space. This concept is also addressed in Exception No. 10, which allows for exposed combustible insulation in noncombustible concealed spaces. The restriction in Exception No. 10 is that the heat content of the facing and substrate of the insulation material does not exceed 1000 BTU per sq. ft. The key issue here is the backing on the insulation, which has to be equal to or less than 1000 BTU per sq.ft. If it is greater than this, sprinklers will be required. The location of the insulation is also a factor. If the insulation is installed on top of the bottom chord, placing the entire bottom chord below the insulation, the concealed space will now have to be considered as containing combustible construction and will require sprinklers.

Technical Update is prepared by the Technical Services Department of the AFSA: Director of Technical services. Roland Huggins, a PE registered in fire protection engineering; and Phill Brown, a NICET IV certified automatic sprinkler technician. Opinions are provided with the understanding that AFSA assumes no liability for the opinions or actions taken on them and they are not to be considered a formal interpretation of the NFPA.

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